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UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

In re application of:

MARMO ET AL.

) Group Art Unit: 3738

Serial No. 10/661,400

) Examiner: N/A

Filed: September 12, 2003

For: DEVICES AND METHODS FOR  
IMPROVING VISION

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INFORMATION DISCLOSURE STATEMENT

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Dear Sir:

Applicant wishes to call to the attention of the Examiner the documents cited on the accompanying Form PTO-1449. No concession is made that these documents are prior art, and applicant expressly reserves the right to antedate the documents as may be appropriate. This Information Disclosure Statement is being filed before the first office action has been received from the Patent and Trademark Office in the above-identified application.

Respectfully submitted,

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| Form PTO-1449<br><b>INFORMATION DISCLOSURE CITATION<br/>IN AN APPLICATION</b><br>(Use only if necessary)   |  | Docket No.: 4108<br>Applicant: Marmo et al.<br>Filing Date: 09/12/03 |                        | Application No.: 10/661,400<br>Group Art Unit: 3738 |             |                               |
|--|--|--|------------------------|---|-------------|-------------------------------|
| <b>U. S. PATENT DOCUMENTS</b>  |  |  |                        |   |             |                               |
| EXAMINER<br>INITIAL  | DOCUMENT NUMBER  | DATE   | NAME                   | CLASS   | SUBCLASS    | FILING DATE<br>IF APPROPRIATE |
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|  | 5171318  | 12/15/92   | Gibson et al.          |   |             |                               |
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|  | 5433745  | 07/18/95   | Graham et al.          |   |             |                               |
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| DOCUMENT NUMBER  | DATE   | COUNTRY  | CLASS                  | SUBCLASS  | TRANSLATION |                               |
|  |  |  |                        |   | YES         | NO                            |
|  | WO 93/07889  | 04/29/93   | WIPO                   |   |             |                               |
|  | WO 94/16570  | 08/04/94   | WIPO                   |   |             |                               |
|  | WO 99/37752  | 07/29/99   | WIPO                   |   |             |                               |
|  | WO 00/07525  | 02/17/00   | WIPO                   |   |             |                               |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>  |  |  |                        |   |             |                               |
| AA   | Tsai et al., "Reconstruction of damaged corneas by transplantation of autologous limbal epithelial cells", The New England Journal of Medicine, Volume 343 #2, pg 86-93, 07/13/00. |  |                        |   |             |                               |
| AB   | Han et al., "A fibrin-based bioengineered ocular surface with human corneal epithelial stem cells", Cornea, Vol. 21 No. 5 2002, pg 505-510.  |  |                        |   |             |                               |
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| AE   | Online article, Ciba Vision website, "research and development" "Sub-epithelial Seperator", no date given.   |  |                        |   |             |                               |
| AF   | Burrill, Alicia., "Gel-Assisted Lasek", Cataract & Refractive Surgery Today, no date given.  |  |                        |   |             |                               |
| <b>EXAMINER</b>  |  |  | <b>DATE CONSIDERED</b> |   |             |                               |
|  |  |  |                        |   |             |                               |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.<br>Include copy of this form with next communication to the applicant. |  |  |                        |   |             |                               |

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| EXAMINER<br>INITIAL   | DOCUMENT NUMBER | DATE  | NAME                   | CLASS   | SUBCLASS | FILING DATE<br>IF APPROPRIATE |    |
|   | US2001/0047203  | 11/29/01  | Dalton et al.          |   |          |                               |    |
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|   | US2002/0039788  | 04/04/02  | Isseroff et al.        |   |          |                               |    |
|   | US2002/0052596  | 05/02/02  | Pallikaris et al.      |   |          |                               |    |
|   | US2002/0055753  | 05/09/02  | Silvestrini            |   |          |                               |    |
|   | US2002/0065555  | 05/30/02  | Nigam                  |   |          |                               |    |
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|   | DOCUMENT NUMBER | DATE  | COUNTRY                | CLASS   | SUBCLASS | TRANSLATION                   |    |
|   |                 |   |                        |   |          | YES                           | NO |
|   | WO 02/06883     | 01/24/02  | WIPO                   |   |          |                               |    |
|   | 2305608         | 04/16/97  | UK                     |   |          |                               |    |
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| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>   |                 |   |                        |   |          |                               |    |
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|   | AB              | "Licensing agreement for automated microkeratome-based device" found online at: <a href="http://www.optical-world.co.uk/Aug%202002%20international_outlook.htm">http://www.optical-world.co.uk/Aug%202002%20international_outlook.htm</a> , no author given, printed on September 13, 2002. |                        |   |          |                               |    |
|   | AG              | Shimmura et al. "Collagen-Poly (N-Isopropylacrylamide)-Based Membranes for Corneal Stroma Scaffolds", Cornea Vol. 22(Suppl. 1):S81-8.   |                        |   |          |                               |    |
|   | AD              | Shimmural et al. "Biocompatibility of Collagen-Based Blended Biomaterials" Invest Ophthalmol Vis Sci 2002;43: E-Abstract 2997 (c) 2002 ARVO.  |                        |   |          |                               |    |
|   | AE              | Jeong et al., "Thermosensitive sol-gel reversible hydrogels" Adv. Drug Deliv. Rev., 54:37-51 (2002)   |                        |   |          |                               |    |
|   | AF              | Vernon et al., "Thermally Reversible Polymer Gels for Biohybrid Artificial Pancreas" Macromol. Symp., 109:155-167 (1996)  |                        |   |          |                               |    |
|   | AG              | Stile et al., "Synthesis and Characterization of Injectable Poly(N-isopropylacrylamide)-Based Hydrogels That Support Tissue Formation in Vitro" Macromolecules, 32:7370-9 (1999)  |                        |   |          |                               |    |
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| EXAMINER<br>INITIAL  | DOCUMENT NUMBER | DATE   | NAME                    | CLASS | SUBCLASS                    | FILING DATE<br>IF APPROPRIATE |
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|  | 5,330,911       | 7/19/94  | Hubbell et al.          |       |                             |                               |
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|  | DOCUMENT NUMBER | DATE   | COUNTRY                 | CLASS | SUBCLASS                    | TRANSLATION                   |
|  |                 |  |                         |       |                             | YES   NO                      |
|  | WO 04/014969    | 02/19/04   | WIPO                    |       |                             |                               |
|  | WO 04/015090    | 02/19/04   | WIPO                    |       |                             |                               |
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|  | AA              | Stile et al., "Poly( <i>N</i> -isopropylacrylamide)-Based Semi-interpenetrating Polymer Networks for Tissue Engineering Applications. 1. Effects of Linear Poly(acrylic acid) Chains on Phase Behaviour" <u>Biomacromolecules</u> 3:591-600 (2002) |                         |       |                             |                               |
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|  | AC              | Hicks et al., "Keratoprosthesis: Advancing Toward a True Artificial Cornea" <u>Surv. Ophthalmol.</u> 42:175-189 (1997)   |                         |       |                             |                               |
|  | AD              | Trinka-Randall and Nugent, "Biological Response to a Synthetic Cornea" <u>Controlled Release</u> 53:205-214.   |                         |       |                             |                               |
|  | AE              | Gutowska et al., "Thermosensitive Interpenetrating Polymer Networks: Synthesis, Characterization, and Macromolecular Release" <u>Macromolecules</u> , 27:4167-4175 (1994).   |                         |       |                             |                               |
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|  | AG              | Lynn & Langer, "Degradable Poly( $\beta$ -amino esters): Synthesis, Characterization, and Self-Assembly with Plasmid DNA" <u>J. Amer. Chem. Soc.</u> , 122:10761-10768 (2000)  |                         |       |                             |                               |
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|   | 2004/0015234    | 01/22/04 | Peyman                  |       |                             |                               |    |
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